



## DESCRIPTION

The SMAF4728A ~SMAF4777A are available in SMAF package

## ORDERING INFORMATION

Package Type	Part Number	
SMAF	SMAF4728A	SMAF4753A
	SMAF4729A	SMAF4754A
	SMAF4730A	SMAF4755A
	SMAF4731A	SMAF4756A
	SMAF4732A	SMAF4757A
	SMAF4733A	SMAF4758A
	SMAF4734A	SMAF4759A
	SMAF4735A	SMAF4760A
	SMAF4736A	SMAF4761A
	SMAF4737A	SMAF4762A
	SMAF4738A	SMAF4763A
	SMAF4739A	SMAF4764A
	SMAF4740A	SMAF4765A
	SMAF4741A	SMAF4766A
	SMAF4742A	SMAF4767A
	SMAF4743A	SMAF4768A
	SMAF4744A	SMAF4769A
	SMAF4745A	SMAF4770A
	SMAF4746A	SMAF4771A
	SMAF4747A	SMAF4772A
SMAF4748A	SMAF4773A	
SMAF4749A	SMAF4774A	
SMAF4750A	SMAF4775A	
SMAF4751A	SMAF4776A	
SMAF4752A	SMAF4777A	
Note	SPQ: 3,000pcs/Reel	
AiT provides all RoHS Compliant Products		

## FEATURES

- Total power dissipation: Max. 1W
- Wide zener reverse voltage range 3.3V to 330V
- Small plastic package suitable for surface mounted design.
- Available in SMAF package

## MECHANICAL DATA

Case: SMAF

Terminals: Solderable per MIL-STD-750,  
Method 2026

Approx. Weight: 27mg 0.00086oz

## PIN DESCRIPTION





## ABSOLUTE MAXIMUM RATINGS AND CHARACTERISTICS

T<sub>A</sub> = 25°C

P <sub>D</sub> , Power Dissipation at T <sub>L</sub> =75°C	1 W
V <sub>F</sub> , Forward Voltage at I <sub>F</sub> =200mA	1.2V
T <sub>J</sub> , Junction Temperature Range	-55°C ~+150°C
T <sub>STG</sub> , Storage Temperature Range	-55°C ~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

## ELECTRICAL CHARACTERISTICS

T<sub>A</sub> = 25°C

Part Number	Zener Voltage Range <sup>NOTE1</sup>				Dynamic Impedance Z <sub>ZT</sub> (at I <sub>ZT</sub> ) Max (Ω)	Reverse Current		Admissible Zener Current I <sub>ZM</sub> (mA)
	V <sub>ZT</sub> (at I <sub>ZT</sub> )			I <sub>ZT</sub> (mA)		I <sub>R</sub> Max (μA)	At V <sub>R</sub> (V)	
	Min (V)	Nom (V)	Max (V)					
SMAF4728A	3.10	3.3	3.50	75	10	100	1	285
SMAF4729A	3.40	3.6	3.80	69	10	100	1	263
SMAF4730A	3.70	3.9	4.10	64	9.0	50	1	243
SMAF4731A	4.06	4.3	4.56	58	9.0	25	1	219
SMAF4732A	4.50	4.7	4.93	53	8.0	10	1	203
SMAF4733A	4.84	5.1	5.36	49	7.0	10	1	186
SMAF4734A	5.32	5.6	5.92	45	5.0	10	2	170
SMAF4735A	5.86	6.2	6.51	41	2.0	10	3	154
SMAF4736A	6.46	6.8	7.18	37	3.5	10	4	140
SMAF4737A	7.12	7.5	7.88	34	4.0	10	5	127
SMAF4738A	7.79	8.2	8.67	31	4.5	10	6	116
SMAF4739A	8.60	9.1	9.59	28	5.0	10	7	104
SMAF4740A	9.50	10	10.5	25	7.0	10	7	95
SMAF4741A	10.4	11	11.6	23	8.0	5	8	86
SMAF4742A	11.4	12	12.6	21	9.0	5	9	79
SMAF4743A	12.4	13	14.1	19	10	5	10	71
SMAF4744A	13.8	15	15.8	17	14	5	11	63
SMAF4745A	15.2	16	17.1	16	16	5	12	58
SMAF4746A	16.8	18	19.2	14	20	5	13	52
SMAF4747A	19.0	20	21.2	13	22	5	15	47
SMAF4748A	20.8	22	23.3	12	23	5	17	43
SMAF4749A	22.8	24	26.0	11	25	5	18	38
SMAF4750A	25.3	27	28.9	9.5	35	5	21	35
SMAF4751A	28.2	30	32.0	8.5	40	5	23	31
SMAF4752A	31.3	33	34.9	7.5	45	5	25	28
SMAF4753A	34.2	36	37.9	7.0	50	5	27	26
SMAF4754A	37.2	39	41.5	6.5	60	5	30	24
SMAF4755A	40.9	43	45.6	6.0	70	1	32	22

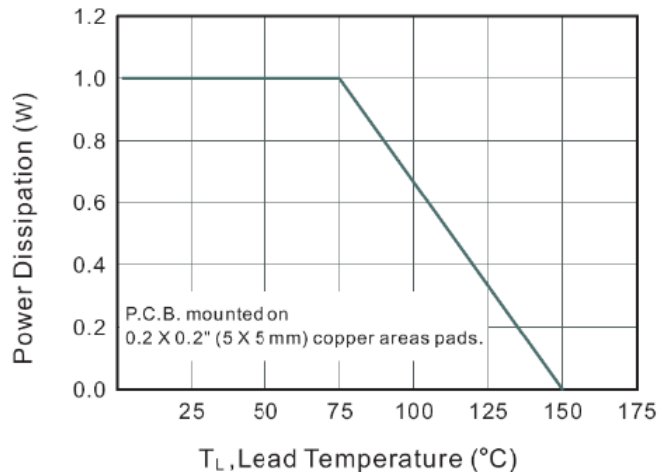


Part Number	Zener Voltage Range			I <sub>ZT</sub> (mA)	Dynamic Impedance Z <sub>ZT</sub> (at I <sub>ZT</sub> ) Max (Ω)	Reverse Current		Admissible Zener Current I <sub>ZM</sub> (mA)
	V <sub>ZT</sub> (at I <sub>ZT</sub> )					I <sub>R</sub> Max (μA)	At V <sub>R</sub> (V)	
	Min (V)	Nom (V)	Max (V)					
SMAF4756A	44.9	47	49.8	5.5	80	1	35	20
SMAF4757A	48.6	51	54.0	5.0	95	1	38	18
SMAF4758A	53.6	56	58.8	4.5	110	1	42	17
SMAF4759A	58.9	62	65.6	4.0	125	1	47	15
SMAF4760A	64.6	68	71.7	3.7	150	1	52	14
SMAF4761A	71.2	75	78.8	3.3	175	1	56	12
SMAF4762A	77.9	82	87.0	3.0	200	1	62	11
SMAF4763A	86.0	91	96.0	2.8	250	1	69	10
SMAF4764A	95.0	100	105	2.5	350	1	76	9.5
SMAF4765A	104	110	116	2.3	450	1	84	8.6
SMAF4766A	114	120	127	2.0	550	1	91	7.8
SMAF4767A	125	135	142	1.9	700	1	100	7.0
SMAF4768A	140	150	157	1.7	900	1	110	6.3
SMAF4769A	155	165	172	1.6	1100	1	120	5.8
SMAF4770A	170	180	191	1.4	1200	1	135	5.2
SMAF4771A	189	200	211	1.2	1400	1	150	4.7
SMAF4772A	209	220	231	1.0	1600	1	165	4.3
SMAF4773A	229	240	251	1.0	1800	1	180	3.9
SMAF4774A	249	260	271	1.0	2000	1	190	3.7
SMAF4775A	269	280	291	1.0	2100	1	205	3.4
SMAF4776A	289	300	315	1.0	2300	1	230	3.1
SMAF4777A	313	330	346	1.0	2500	1	250	2.8

NOTE1: V<sub>ZT</sub> is tested with pulses (20 ms)

## TYPICAL CHARACTERISTICS

Figure. 1 Maximum Continuous Power Derating

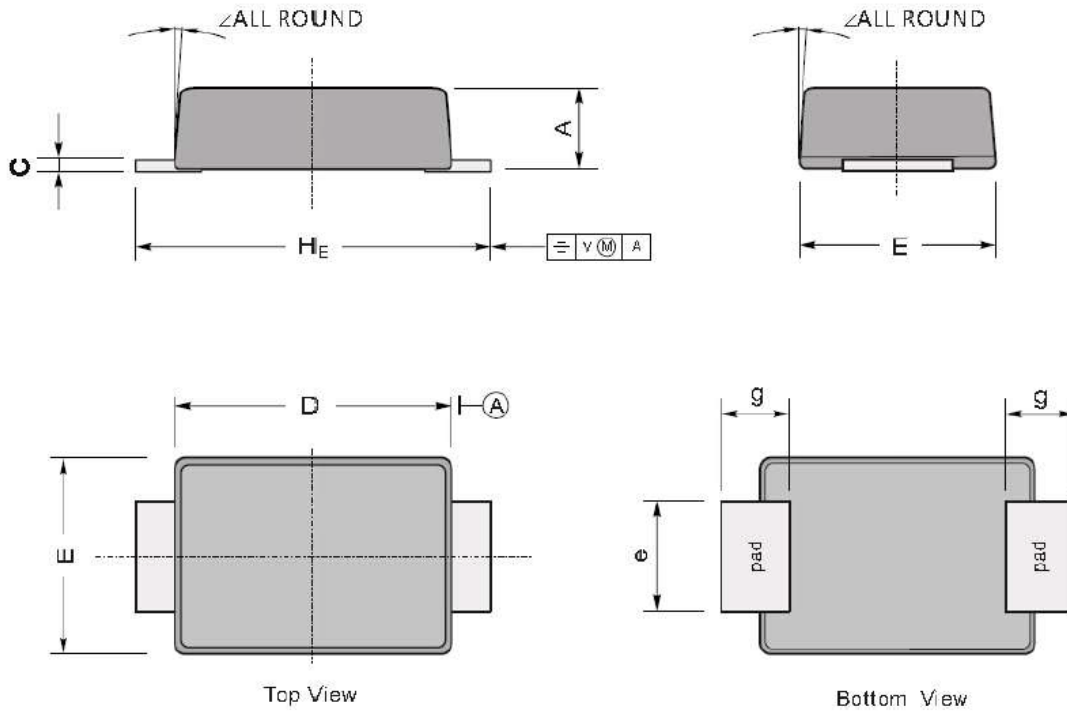




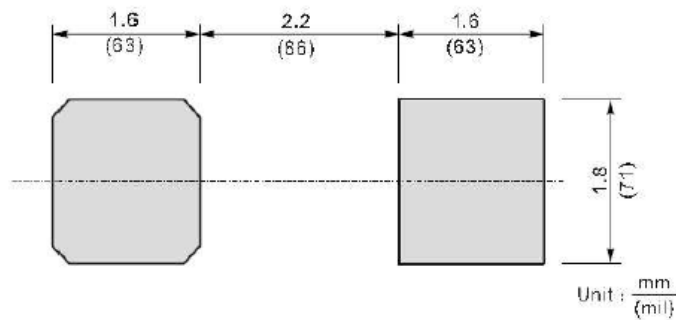
**PACKAGE INFORMATION**

Dimension in SMAF (Unit: mm)

Plastic surface mounted package; 2 leads



The recommended mounting pad size



UNIT		A	C	D	E	e	g	H <sub>E</sub>	$\angle$
mm	Max	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	Min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	Max	43	7.9	146	106	63	47	193	
	Min	35	4.7	130	94	51	31	173	



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